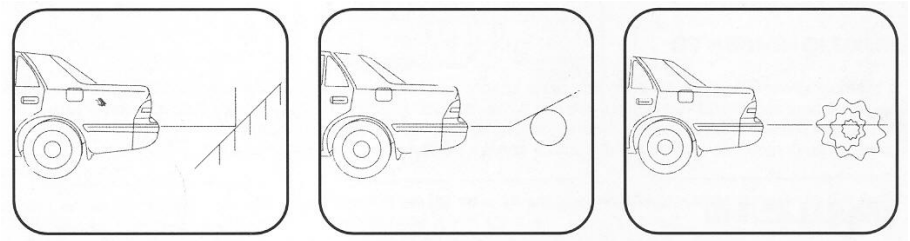
In the following situations malfunctions may occur or obstacles may not be detected:

- in the case of obstacles with a complex or very irregular shape
- in the case of very smooth, reflective obstacle (glass or mirror), in particular if almost parallel to the body of the vehicle



smooth and sloping smooth and circular or sound-absorbent obstacles

DISPOSAL!
Dispose of waste electrical and eletrionic equipment:
When the product has become unusable, dispose of it in accordance with the applicable statutory regulation

ⓘ IMPORTANT NOTES

This device has been designed as a driver aid and must not be considered infallible.
Always manoeuvre vehicles with caution and using common sense.
Manoeuvre your car slowly in the interest of your own safety and that of others.
Always stop the vehicle when the hazard warning is activated, in order to take in account movement inertia.
Periodically perform function checks on the sensors and ensure that they are clean at all times.
In the event of rain, snow or ice, the sensors may be subject to a temporary drop in sensitivity of approximately 20%. Drive with even grater caution until evaporation is complete.

This Parking Sensor offers an ideal solution for demanding drivers who care for their vehicle and the safety of their loved ones. Hidden obstacles such as posts and flower-beds can cause serious damage to cars and children may be in danger during reverse movements. The parking sensor notifies the driver of the distance and the position of obstacles by means of an acoustic beep and visual display, to make reverse movements safer. The system switches on automatically when the driver selects reverse gear. The sensors work on cutting-edge ultrasonic detection technology and have been specially designed to blend in perfectly with your vehicle bumper.

❖ **Pack contains:**

1 command module
4 ultrasonic sensors
1 acoustic indicator – LCD, VFD and LED display, depending on which model you choose
1 power supply cable
1 accessory kit
1 instruction manual

❖ **Features:**

- Automatic activation when the reverse gear is chosen
- Clearly visible display indicating the direction and distance of the obstacle
- Integrated beeper for immediate alert
- Easy-to-install, does not require maintenance
- Does not run on battery power when the vehicle is parked and the engine switched off
- Type approved in conformity with European regulations on electromagnetic compatibility.

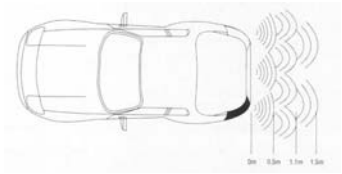
❖ **Technical data:**

- Supply voltage: 12-28V DC
- Current consumption: 200 mA max
- Working temperature: -30°C ~ 70°C
- Storage temperature: -35°C ~ 75°C
- Obstacle detection: from 150 cm from the bumper (post dia. 80 mm)
- Reliability over time: satisfies the strictest automotive standards

❖ **OPERATIONS**

The parking sensor emits ultrasonic waves that are reflected by the obstacle, to cause a visual-acoustic signal. The precise distance of the obstacle is detected to facilitate parking manoeuvres even in the most restricted spaces. The frequency of the ultrasonic waves has been chosen in order to minimise disturbance or damage to people and pets.

❖ SIGNALS



Obstacle distance	Distance category	Beep	LCD
150 ～ 110 cm	Safety	BI.....BI.....BI.....	1.5m ～1.1m
100 ～ 60 cm	Caution	BI...BI...BI.....BI...BI...BI....	1.0m ～0.6m
50 ～ 30 cm	Hazard	BI.BI.BI.BI.BI.BI.BI….	0.5m ～0.3m
Less than 30 cm	Hazard	BI.BI.BI.BI.BI.BI.BI….	P_

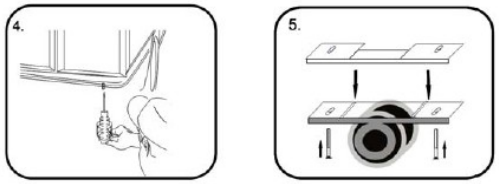
❖ INSTALLATION

Before you start: inspect the installation area on the vehicle's bumper and check that there are no obstructions to making the holes.

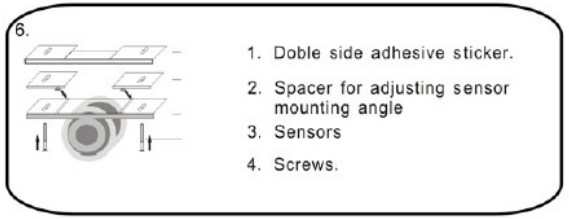
Perfect sensor installation relies on two factors:

- Position: height from the ground and distance from the middle of the bumper (avoid the area immediately above the exhaust pipe)
- Angle: accurate beep depend on the sensors being mounted at the correct angle

1. The installation area must be as far back as possible and must be obstacle-free The device must be installed at a height of between 80 cm and 100 cm from the ground.
2. Use a marker to mark a point 10-15 cm in from the outmost point of your truck, the ideal distance is 12cm for both sides.
3. Measure the distance between the two outrer points and divide that value by 3= "I", starting from point "A", mark two more points at "A+I" and "A+2I" respectively.



4. Mark a small indent by hand and then use the hole borer to make holes for screw in the bottom of the truck rear metal bar, the diameter of hole borer for screws is requested to be 3,5mm this hole borer is not provied in the kit).
5. If adjusting of sensor is not needed, simply stick one side of adhesive sticker on the sensor and the other side on the position where the hole is located, finally secure the screws firmly into the holes.



6. If adjusting of sensor mounting angle is needed please insert the NO. 1 spacer into the NO.1 socket in the sensor and NO.2 spacer into NO.2 socket in the sensor. Then stick one side side of adhesive stick on the sensor and the other side on the position where the hole is located, finally secure the screws firmly into the holes.
7. Position the electrical box unit inside, in a position where it will remain dry.
8. Position the beeper buzzer/display LCD as desired
9. Connect the sensors and the beeper buzzer/display LCD to the elettrical box.
10. Connect the red cable to the power supply of the reverse light and the black to the vehicle's ground.

❖ INSTALLATION CHECK

In order to perform the check your vehicle must be in a flat, smooth area free of obstacles within a radius of 3 meters from the rear and sides of the vehicle. With the hand brake on and the engine switched off, put the car into reverse gear and turn the ignition key to "ON", so that the reverse light switched on.

The system will come on and by simply standing or walking behind the vehicle at various distances, you should note the indication of your distance from the sensors and your position (right, left or centre).

If the caution or "Hazard" signals persist, the sensors are mounted too low or at an incorrect angle. Connect one sensor at a time to isolate the fault and then rotate the sensor through a maximum of 180° and repeat the check.
Once the check has been completed, the sensors can be fixed permanently and the cables can be fastened with the bands provided and arranged in the most convenient and aesthetic way.